

Puget Sound Salmon Recovery Region



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Puget Sound Basin lies between the Cascade and Olympic mountains in Northwest Washington. It is the second largest estuary in the United States and covers more than 16,000 square miles. Twenty percent of the area is land, as diverse as farms, forests, parks, small towns, and busy cities. The remainder is freshwater, estuarine, and marine waters; over 20 major river systems and their tributary creeks drain mountain elevations of 7000 feet or more and drop to sea level within 50 to 70 miles.

Puget Sound is home to two-thirds of the state's population. Draft Puget Sound Chinook and bull trout recovery plans were completed in June 2005 and posted in the Federal Register in December 2005. The draft Hood Canal summer chum recovery plan was submitted in November 2005 and placed in the Federal Register in August 2006.

Key Facts

LISTED FISH

Chinook (threatened)
Hood Canal summer chum
(threatened)
Bull trout (threatened)

MAJOR FACTORS

LIMITING RECOVERY

- ▶ Degraded floodplain and channel structure
- ▶ Degraded nearshore/marine and estuarine conditions and habitat loss
- ▶ Degraded riparian area and loss of in-river large woody debris
- ▶ Excessive sediment
- ▶ Degraded water quality and temperature
- ▶ Impaired instream flows
- ▶ Barriers to fish passage

RECOVERY PLANNING STATUS

Draft recovery plans completed for Chinook in June 2005 and posted in Federal Register December 2005. Final adoption by NMFS expected January 2007. Draft summer chum plan submitted in November 2005 and placed in Federal Register August 2006.

REGIONAL RECOVERY ORGANIZATION

Puget Sound Shared Strategy (for Chinook); Hood Canal Coordinating Council (for summer chum).

FEDERALLY RECOGNIZED TRIBES

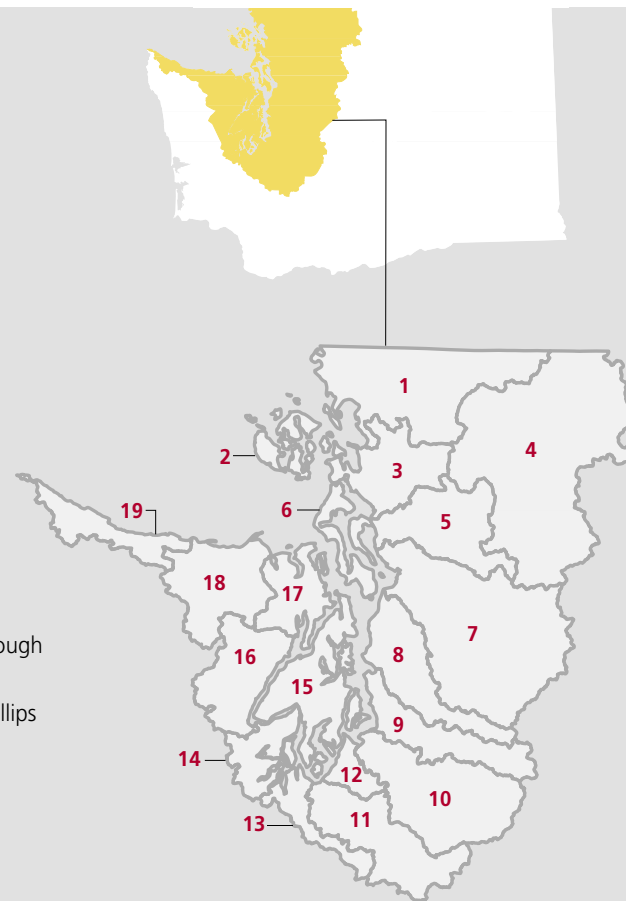
Lummi Nation, Nooksack, Stillaguamish, Jamestown S'Klallam, Muckleshoot, Nisqually, Port Gamble S'Klallam, Lower Elwha S'Klallam, Puyallup, Samish, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Suquamish, Swinomish, Tulalip, Upper Skagit, Snoqualmie.

COUNTIES

All or parts of Whatcom, Skagit, Island, San Juan, Snohomish, King, Pierce, Thurston, Mason, Kitsap, Jefferson, and Clallam.

WATER RESOURCE INVENTORY AREAS (WRIAs)

- 01 Nooksack
- 02 San Juan
- 03 Lower Skagit
- 04 Upper Skagit
- 05 Stillaguamish
- 06 Island
- 07 Snohomish
- 08 Cedar / Samish
- 09 Green / Duwamish
- 10 Puyallup / White
- 11 Nisqually
- 12 Chambers / Clover
- 13 Deschutes
- 14 Kennedy / Goldsborough
- 15 Kitsap
- 16 Skokomish / Dosewallips
- 17 Quilcene / Snow
- 18 Elwha / Dungeness
- 19 Hoko / Lyre





Area of
Detail

PUGET SOUND SALMON RECOVERY REGION

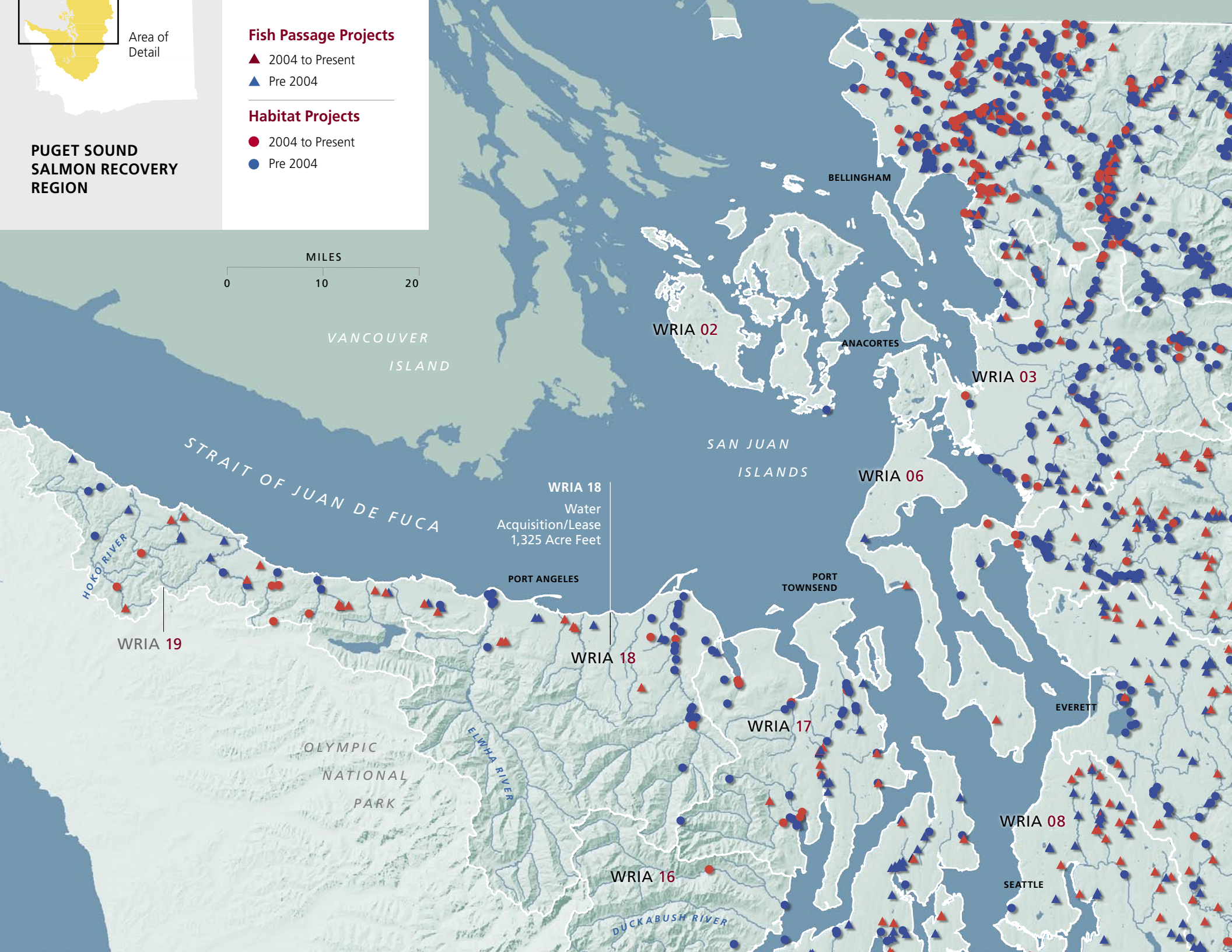
Fish Passage Projects

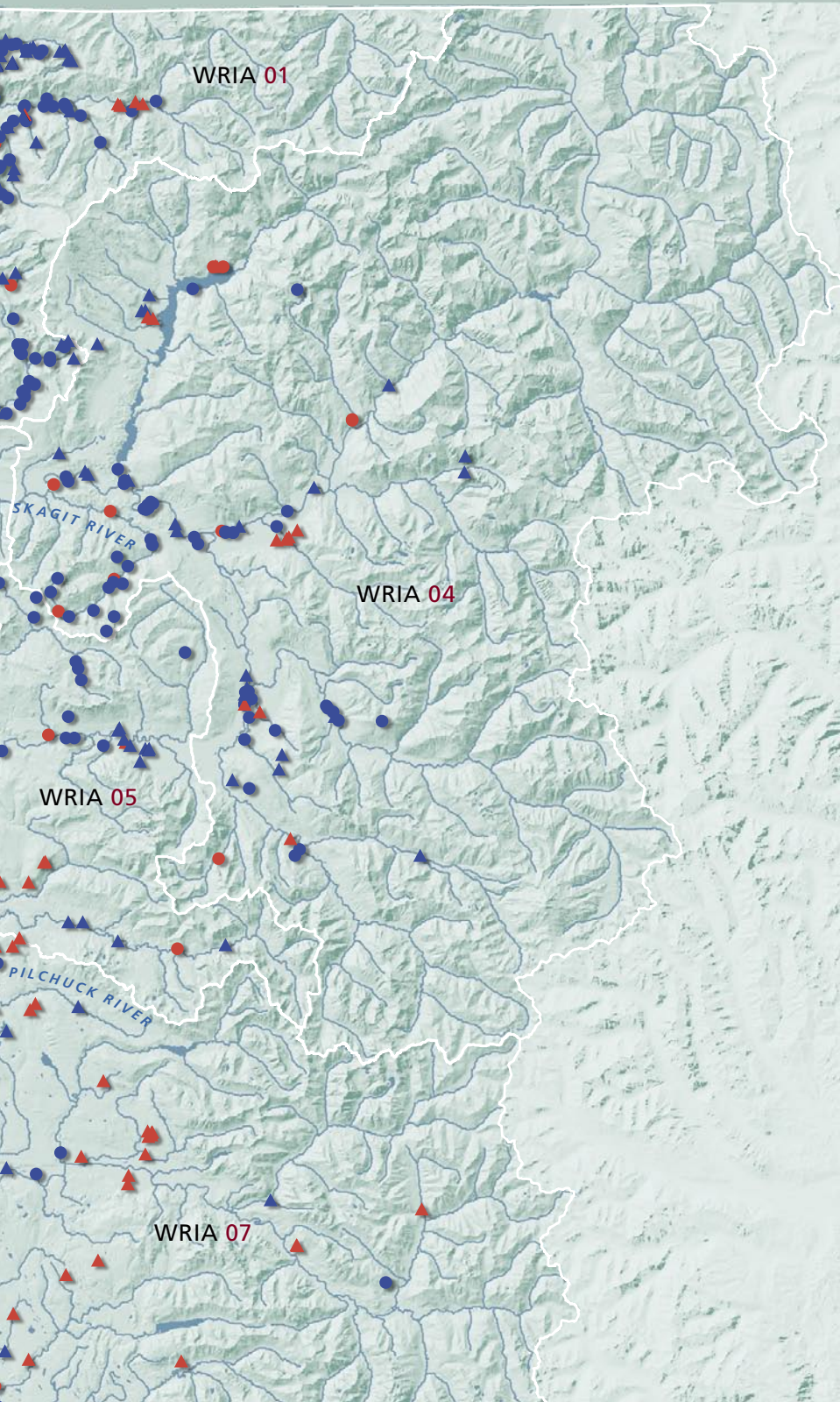
- ▲ 2004 to Present
- ▲ Pre 2004

Habitat Projects

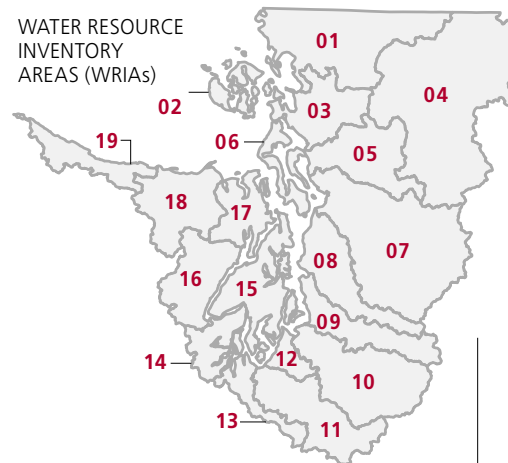
- 2004 to Present
- Pre 2004

MILES
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WATER RESOURCE
INVENTORY
AREAS (WRIAs)

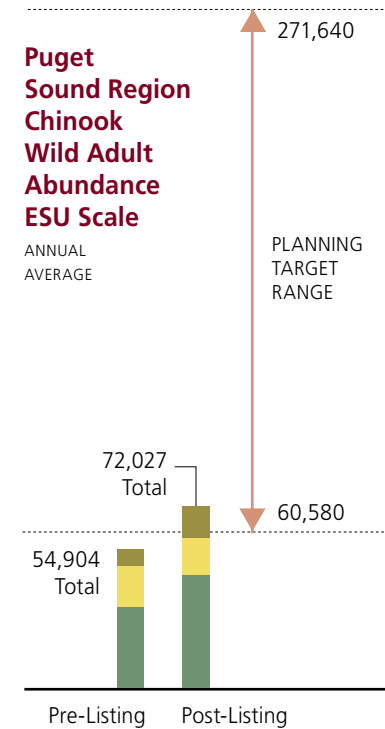


Watershed Cleanup Plans

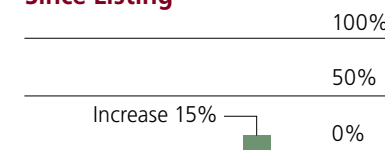
	Plans underway or completed	Plans Needed
WRIA 01	94	175
WRIA 02		3
WRIA 03	32	68
WRIA 04	1	1
WRIA 05	43	51
WRIA 06	3	3
WRIA 07	57	40
WRIA 08	33	162
WRIA 09	23	151
WRIA 10	42	60
WRIA 11	5	21
WRIA 12	3	20
WRIA 13	10	66
WRIA 14	10	67
WRIA 15	88	156
WRIA 16	12	21
WRIA 17	6	29
WRIA 18	16	26
WRIA 19		16

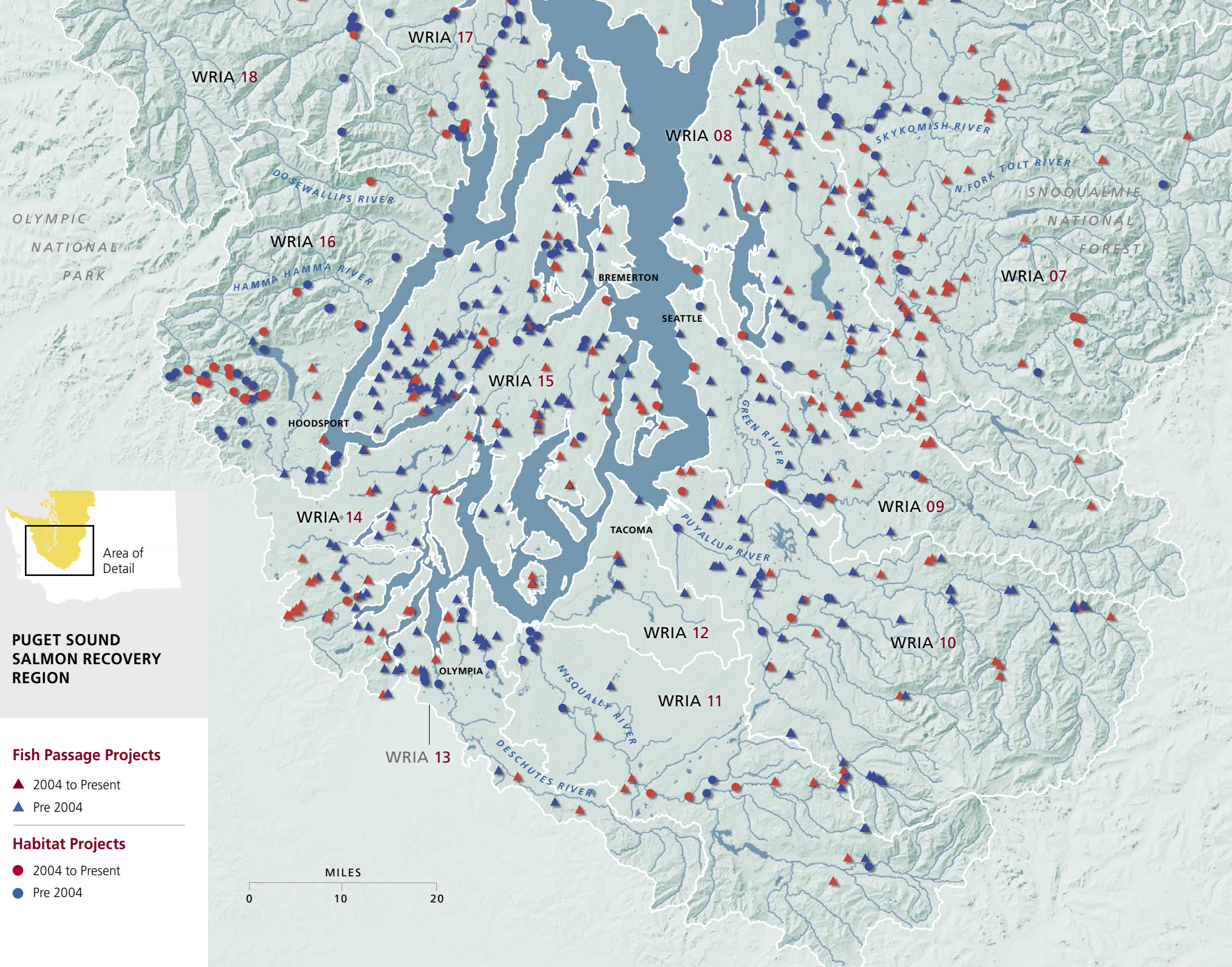
Puget Sound Region Chinook Wild Adult Abundance ESU Scale

ANNUAL
AVERAGE

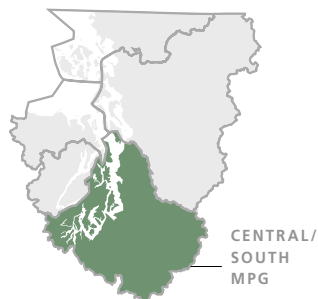
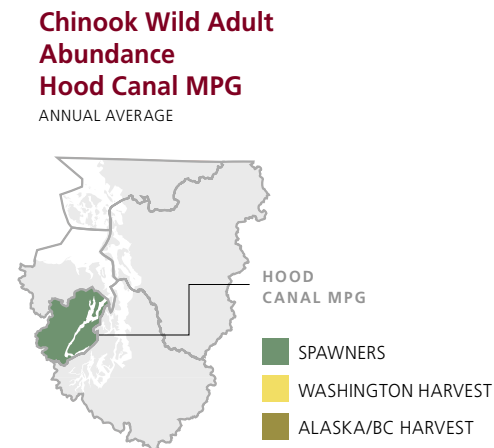
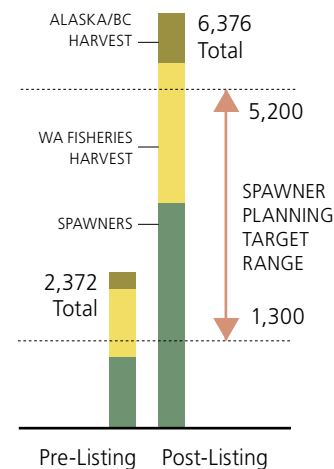
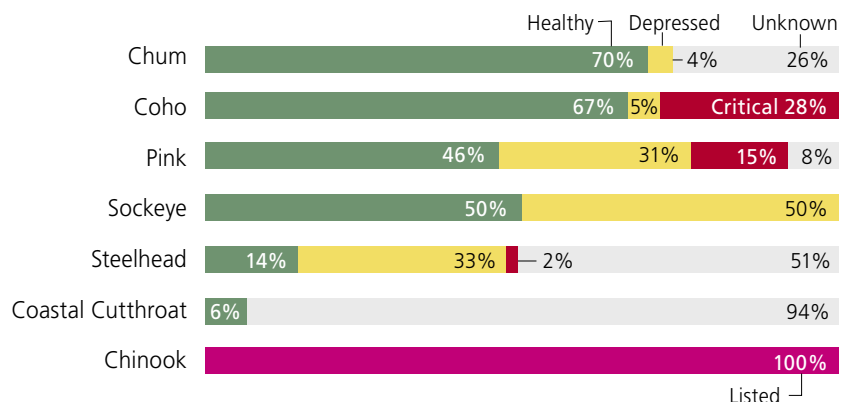


Puget Sound Region Wild Chinook Juvenile Production Since Listing

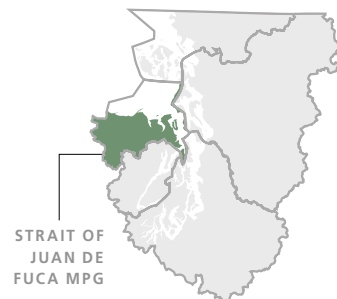
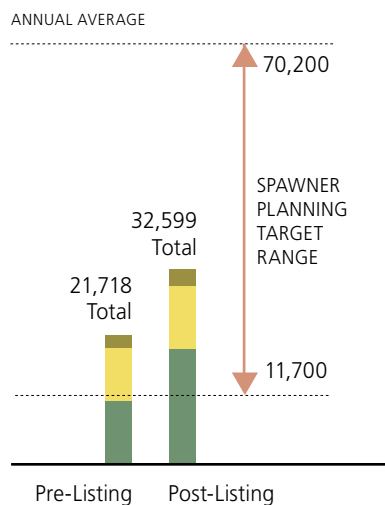




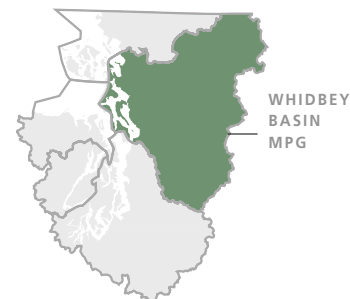
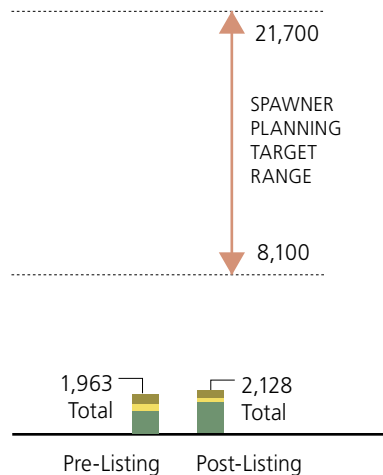
Fish Status



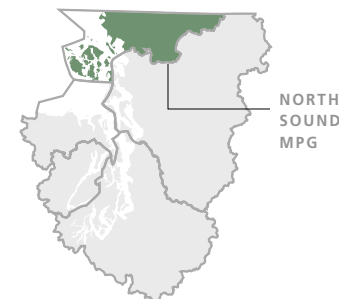
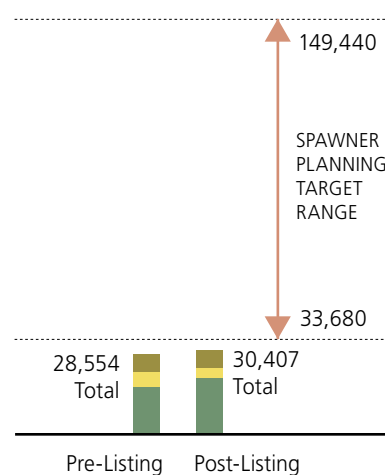
Chinook Wild Adult Abundance Central/South MPG



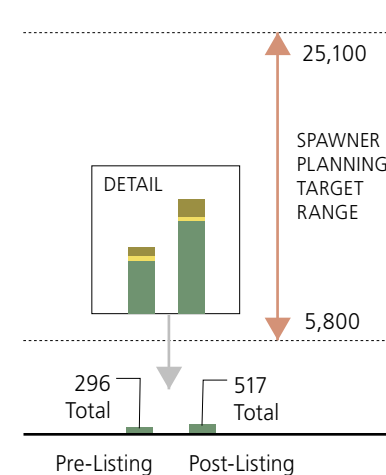
Chinook Wild Adult Abundance Strait of Juan de Fuca MPG

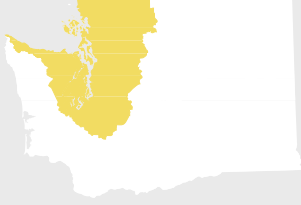


Chinook Wild Adult Abundance Whidbey Basin MPG



Chinook Wild Adult Abundance North Sound MPG





PUGET SOUND
SALMON RECOVERY
REGION

SNOHOMISH BASIN



WATER
RESOURCE
INVENTORY
AREA

Watershed Watch Snohomish Basin WRIA 07



The Snohomish River Basin lies in King and Snohomish Counties in east-central Puget Sound. It covers 1,856 square miles (1,187,840 acres) and is the second largest watershed in Puget Sound. The Snoqualmie and Skykomish rivers are the major surface waters in the watershed, and they converge to become the Snohomish River approximately 20 miles upstream of Puget Sound. Other major tributaries include the Tolt, Sultan, and Pilchuck.

The South Fork Tolt and Spada Lake Reservoirs supply water for more than a million people in Seattle, Everett, and nearby communities. About 75% of the watershed remains covered by natural vegetation. Municipal and industrial areas are concentrated along the western part of the major rivers and in and around Everett. Population growth is rapid, with a 59% growth rate projected for 2000-2030.



Tulalip Tribes
Cultural Resources Survey
the Qwuloolt site

Qwuloolt Site
Planned for removal
in 2009

TULALIP TRIBES



Raging River
Restoration/Acquisition

SALMON RECOVERY FUNDING BOARD



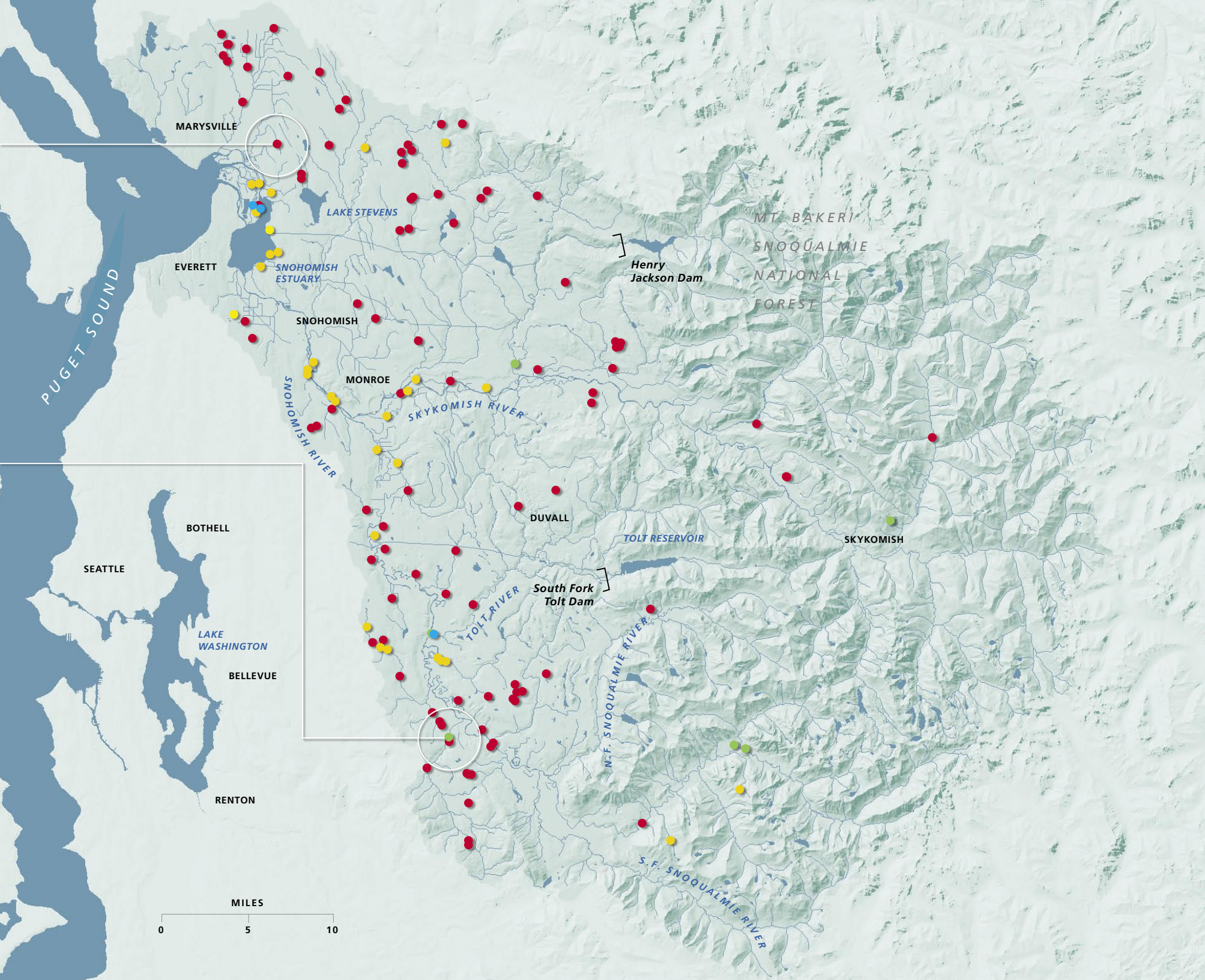
Wetland and
Natural Resources
Survey Crew

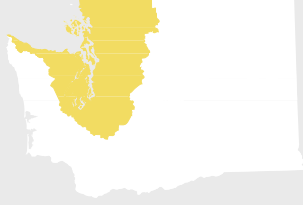


TULALIP TRIBES

RESTORATION PROJECTS

- Fish Passage
- Riparian
- Instream Habitat
- Instream Flows
- Estuary
- Upland
- Miscellaneous





PUGET SOUND
SALMON RECOVERY
REGION

SNOHOMISH BASIN



WATER
RESOURCE
INVENTORY
AREA

SNOHOMISH BASIN WRIA 07 RECOVERY QUESTIONS

Are hydroelectric facilities operating in a “fish friendly” manner?

Indicator	Measured Results
Upstream passage goals at FERC licensed facilities	Black Creek, May Creek, Smith Creek, Twin Falls, Weeks Falls, Woods Creek: Unknown Jackson Project: None ; South Fork Tolt: None Required ; Overall: Unknown
Actual upstream passage achieved (any or all years for which data are available 1999-2006)	Black Creek, May Creek, Smith Creek, Twin Falls, Weeks Falls, Woods Creek: Unknown Jackson Project: None ; South Fork Tolt: None Required ; Overall: Unknown
Downstream passage goals at FERC licensed facilities	Black Creek, May Creek, Smith Creek, Twin Falls, Weeks Falls, Woods Creek: Unknown Jackson Project: None ; South Fork Tolt: None Required ; Overall: Unknown
Actual downstream passage achieved (any or all years for which data are available 1999-2006)	Black Creek, May Creek, Smith Creek, Twin Falls, Weeks Falls, Woods Creek: Unknown Jackson Project: None ; South Fork Tolt: None Required ; Overall: Unknown

Are streams accessible to wild salmon?

Indicator	Measured Results				
Inventory of major blockages	<table><tr><td>Complete barriers</td><td>Partial barriers</td></tr><tr><td>16</td><td>24</td></tr></table>	Complete barriers	Partial barriers	16	24
Complete barriers	Partial barriers				
16	24				
Miles of anadromous waters inaccessible	Not available				

Are listed populations abundant and productive?

Indicator	Measured Results				
Run size achieved, 5 year average pre- and post listing. Wild component of Whidbey Basin Major Population Group.	<table><tr><td>Pre-listing</td><td>28,554</td></tr><tr><td>Post-listing</td><td>30,407</td></tr></table>	Pre-listing	28,554	Post-listing	30,407
Pre-listing	28,554				
Post-listing	30,407				
Juvenile production (baseline mean)	1,232,397				

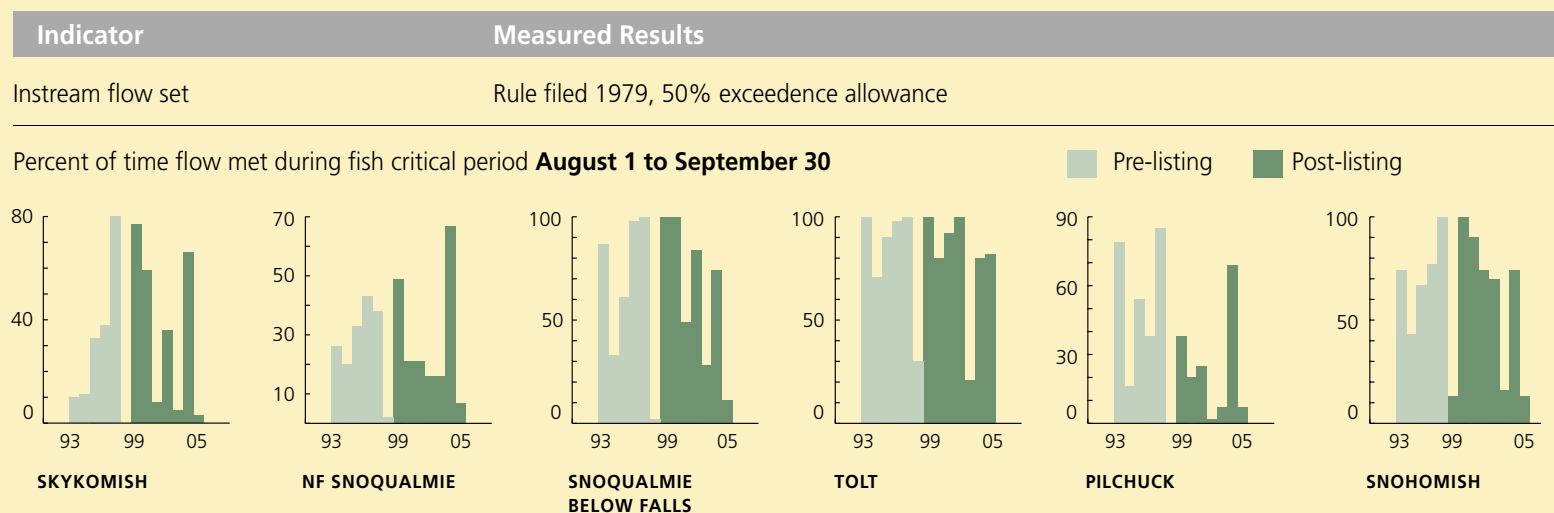
Is water clean enough to support wild salmon?

Indicator		Measured Results	
Water quality index parameters	Fecal coliform	28	4
	Dissolved oxygen	57	7
	pH	59	5
	Temperature	50	16

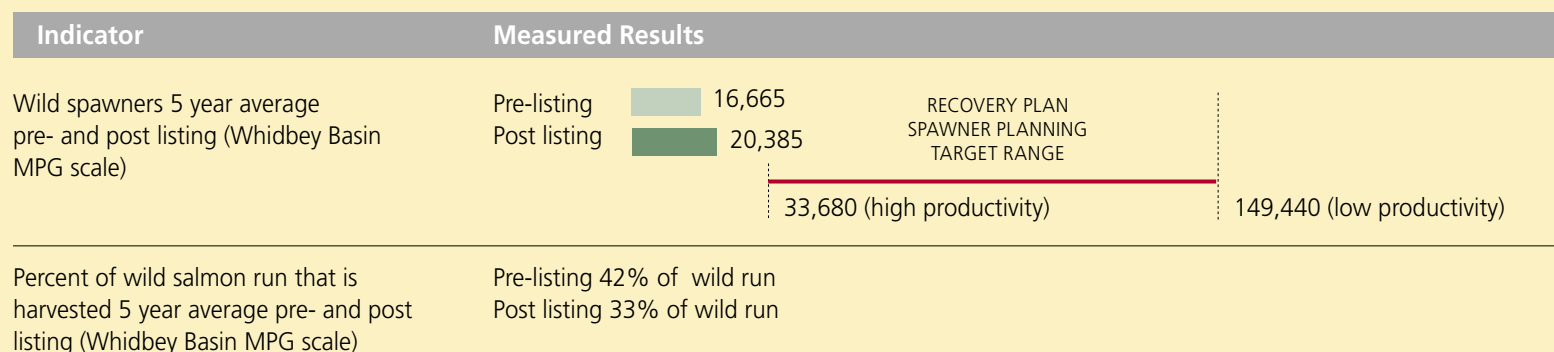
Stream segments meeting standard

Stream segments not meeting standard

Do rivers and streams have flows that support wild salmon?



Does harvest management protect wild salmon?



Do hatchery practices meet the needs of wild salmon?

